

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/878,356	06/12/2001	Alain Vallee	208839US0XDIV	2549	
22850	7590 04/1	2003			
•	PIVAK, MCCLE	EXAMINER			
1940 DUKE	STREET RIA, VA 22314	WEINER, LAURA S			
ALLAANDI	dn, vn 22514			· · · · · · · · · · · · · · · · · · ·	
			ART UNIT	PAPER NUMBER	
	•		1745	5	
				DATE MAILED: 04/16/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

<del>`</del>						
		Application No.	Applicant(s)			
		09/878,356	VALLEE ET AL.			
	Office Action Summary	Examiner	Art Unit			
	<u> </u>	Laura S Weiner	1745			
Period fo	Th MAILING DATE of this communication apport Reply	ars on the cov r sh et wi	th the correspondence address			
A SHOTHE I	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl or period for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a re y within the statutory minimum of thirt will apply and will expire SIX (6) MON's, cause the application to become AB.	eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).			
1)⊠	Responsive to communication(s) filed on 12.	<u>June 2001</u> .				
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4) 🖂	Claim(s) 48-62 is/are pending in the application	on.				
	4a) Of the above claim(s) is/are withdra	wn from consideration.				
5) 🗌	Claim(s) is/are allowed.					
6)⊠	☑ Claim(s) <u>48-62</u> is/are rejected.					
7) 🗌	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) 🗌 -	The specification is objected to by the Examine	r.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) 🔲 🗀	The oath or declaration is objected to by the Ex	aminer.				
Priority u	ınder 35 U.S.C. §§ 119 and 120					
13)⊠	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C. §	3 119(a)-(d) or (f).			
a)⊠ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority document	s have been received in A	oplication No			
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14)∐ A	cknowledgment is made of a claim for domesti	c priority under 35 U.S.C.	§ 119(e) (to a provisional application).			
	) $\square$ The translation of the foreign language proAcknowledgment is made of a claim for domest					
Attachment						
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) 3	5) Notice of Ir	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)			
S. Patent and Tra PTO-326 (Rev		tion Summary	Part of Paper No. 5			

Art Unit: 1745

## **DETAILED ACTION**

## Response to Amendment

1. Examiner acknowledges the cancellation of claims 1-47 and addition of claims 48-62 cited in PreAmendment A dated 6-12-01. Claims 48-62 have been examined on their merits.

## Claim Rejections - 35 USC § 112

2. Claims 48-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 48 is rejected because it is unclear what is meant by "coating an electrode support in air". It is unclear what is meant by "second polymer" because there is no first polymer cited previously. It is unclear what is meant by "on the porous composite electrode which is which is".

Claim 52 is rejected because it is unclear what is meant by "composite cathode ...phosphate of a transition metal operating at 3.5-3.7 V" because it is unclear how a cathode material has a voltage.

Claim 53-54, 59 are rejected because it is unclear how claim 53 further defines claim 48 from which the claim depends from because the claim already cites that it is thermally, UV or electron beam cross-linkable.

Art Unit: 1745

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in

the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent

by another filed in the United States before the invention by the applicant for patent, except that an international

application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of

an application filed in the United States only if the international application designated the United States and was

published under Article 21(2) of such treaty in the English language.

4. Claims 48-51, 55-56, 62 are rejected under 35 U.S.C. 102(e) as being anticipated by

Kronfli et al. (6,037,080).

Kronfli et al. teaches in column 3, lines 44-67, that the electrode composite mix

comprising PVDF methacrylic acid graft polymer, LiClO4, dimethyl acetamide, EC, tetraglyme

and graphite was coated on a copper current collector. The composite electrode were vacuum

dried for 2 hours. Kronfli et al. teaches in column 5, Example 3, that lithium half cells were then

constructed by coating first layer of PVDF-based electrolyte directly onto the composite graphite

electrode. Kronfli et al. teaches in Example 1 that the electrolyte comprises PVDF-methacrylic

acid graft polymer, LiClO4 dissolved in DMA, EC and tetraethylene glycol dimethyl ether

(tetraglyme).

Application/Control Number: 09/878,356

Art Unit: 1745

Allowable Subject Matter

5. Claims 57-58, 60-61 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

6. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Laura Weiner whose telephone number is (703) 308-4396. The examiner

works a flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Patrick Ryan, can be reached at (703) 308-2383. The fax phone number for non-after finals is

703-872-9310 and the fax phone number for after-finals is 703-872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0661.

Laura S. Weiner

**Primary Examiner** 

Art Unit 1745

April 14, 2003

Page 4